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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,865	10/20/2003	Che-Ming Teng	16127-002003	3339

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EXAMINER
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BERNHARDT, EMILY B

ART UNIT	PAPER NUMBER
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1624

DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/689,865

Applicant(s)

TENG ET AL.

Examiner

Emily Bernhardt

Art Unit

1624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 14-30 is/are pending in the application.
- 4a) Of the above claim(s) 23-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-20 and 22 is/are rejected.
- 7) ☒ Claim(s) 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

In view of Applicants' response filed on 9/28/06 the following applies.

Applicants are reminded that the claims still contain nonelected subject matter in main claim 14 as well as in all of claims 23-30. Note the previous action which identified the examined subject matter as being Group III A.

Claims 14-20 and 22 remain rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Throughout applicants' traverse it is stressed that  $R^a$  is limited to the benzo[1,3]dioxol-5-yl ring. This is not correct.  $R^a$  can combine with geminal  $R^b$  to form a cycloalkyl, heterocycloalkyl, aryl or heteroaryl. Specification explicitly states that cycloalkyl and heterocycloalkyl rings can be fused with aryl or heteroaryl. However  $R^a$  is but one choice present within "A" when a double bond is present. When a single bond is present then A can be H or  $CH(R^aR^b)$ . Each of these R variables can be *inter alia* aryl, heteroaryl, heterocycloalkyl or together form a cycloalkyl, heterocycloalkyl, aryl or heteroaryl. Further exacerbating this already

enormous scope is the lack of any description describing suitable heterocycloalkyl rings (only one is mentioned on p.3) or suitable rings fused to aforementioned cycloalkyl, heterocycloalkyl rings. Additionally exacerbating the scope is the inclusion of **one or more** substituents for the moieties "alkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl and arylalkoxy" moieties present throughout all of the variables. Such substituents include "acyl", "acyloxy", "carboxylic ester" not further described as to structural makeup as well as even more aryl, heteroaryl, cycloalkyl, heterocycloalkyl rings. Thus, the examiner is not being unreasonable in maintaining this rejection even when there are 35 examples described as applicants urge, given the claims' scope when read in light of the specification.

It should be noted that **only** compound 23 is within the elected scope still being claimed and thus is not remotely representative of such a scope.

Additional examples having single bonds at both ends have similar substitution permitted on the rings which are by far monocyclic heteroaryls having 1 heteroatom in the ring or phenyl rings. There are no saturated rings either singly attached to =C or forming a ring with said =C or when A is singly bonded nor are there any fused cycloalkyl/heterocycloalkyl rings.

Simply asserting that the entire genus inhibits angiogenesis does not automatically avoid an enablement rejection. If it did, the factors discussed in *In re Wands* and the MPEP would not have to be evaluated. Given the many factors that do pertain in the instant case as discussed in previous action there is reason to question efficacy of the instant scope given the wide structural variation permitted coupled with the lack of any structure activity data. Again see MPEP 2164.03. Applicants' analysis of the enablement requirement is not consistent with the MPEP 2164.08(b) which states that claims that read on "... significant numbers of inoperative embodiments would render claims nonenabled when the specification does **not** clearly identify the operative embodiments and undue experimentation is involved in determining those that are operative." . Synthesizing and testing for a scope representative of a billion compounds would seem undue.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 14-16 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teng. While applicants' amendments have removed the anticipatory species, as discussed in the above 112 rejection, instant

claims cover alternate embodiments at "A" when singly and doubly bonded. Note the definition of "A" in Teng which is very similar to that claimed herein. Thus it would have been obvious to one skilled in the art at the time the instant invention was made to it would have modify the species in Teng which were previously anticipated either by replacing the double bond at the "A" end with a single bond or replacing the particular aryl/heteroaryl rings that are singly bonded to =C with rings resulting in exocyclic double bonds in view of the express teachings in Teng.

The obviousness-type double patenting rejection is overcome as the claims in US'649 being much narrower than herein no longer overlap as "A" is always doubly bonded with attachments to =C being singly bonded. Benzodioxolyl is not particularly taught much less claimed.

Claim 21 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a

first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emily Bernhardt whose telephone number is 571-272-0664.

If attempts to reach the examiner by telephone are unsuccessful, the acting supervisor for AU 1624, James O. Wilson can be reached at 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Art Unit: 1624

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*Emily Bernhardt*

Emily Bernhardt  
Primary Examiner  
Art Unit 1624